

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND**

CHANGZHOU KAIDI ELECTRICAL  
CO., LTD., et al.

v.

OKIN AMERICA, INC., et al.

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Civil No. CCB-13-1798

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**MEMORANDUM**

Plaintiffs Changzhou Kaidi Electrical Co., Ltd. and Kaidi, LLC (collectively, “Kaidi”) bring this suit against Okin America, Inc. and Dewert Okin GmbH (collectively, “Okin”), seeking a declaration that the KDPT005 linear actuator does not infringe U.S. Patent No. 5,927,144 (“the ‘144 patent”).<sup>1</sup> Kaidi also seeks a judgment declaring the ‘144 patent invalid. Okin counterclaimed, alleging infringement of the ‘144 patent. A Markman hearing and tutorial was held on April 23, 2014, and this matter is now before the court for claim construction. The court shall construe the following terms: (1) surrounded (Claim 1), (2) surrounds (Claim 2), (3) guide section (Claim 1), (4) adjuster (Claim 1), (5) slider (Claim 1), (6) slider (Claim 2), (7) two parts (Claim 1), and (8) slit (Claim 1).<sup>2</sup>

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<sup>1</sup> The ‘144 patent relates to a linear actuator for adjusting parts of seating and reclining furniture.

<sup>2</sup> To the extent this opinion does not address the term “guide sections,” as it appears in Claims 2, 26, 27, and 28, the parties are invited to provide proposed constructions for this term. At the Markman hearing, the parties debated whether each part of the guide section must guide a moving part.

## ANALYSIS

The court construes patent claims as a matter of law. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). As explained by the Federal Circuit, “words of a claim are generally given their ordinary and customary meaning,” and “the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (citations and internal quotation marks omitted). “A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.” *Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005); *see also Pfizer, Inc. v. Teva Pharm., USA, Inc.*, 429 F.3d 1364, 1373 (Fed. Cir. 2005) (suggesting that the court should construe claims so the patent is “internally consistent”).

To determine the ordinary and customary meaning of terms, the court looks first to intrinsic evidence<sup>3</sup> and then, in its discretion, to extrinsic evidence.<sup>4</sup> In considering the intrinsic evidence, “[t]he appropriate starting point . . . is always with the language of the asserted claim itself.” *Phonometrics, Inc. v. Northern Telecom Inc.*, 133 F.3d 1459, 1464 (Fed. Cir. 1998). Then, the court turns to the specification, which is “the single best guide to the meaning of a disputed term;” indeed, it is usually dispositive. *Phillips*, 415 F.3d at 1315; *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). After considering the claims and the specification, the court may look to the prosecution history if in evidence. *Vitronics Corp.*, 90 F.3d at 1582. The prosecution history may have a more limited role in claim

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<sup>3</sup> Intrinsic evidence refers to “the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

<sup>4</sup> Extrinsic evidence refers to “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995).

construction than the specification. Reliance on the prosecution history may help ensure “that claims are not construed one way in order to obtain their allowance and in a different way against accused infringers.” *Chimie v. PPG Industries, Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005). In other words, “where the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender.” *Id.* (citation and internal quotation marks omitted).

When analysis of the intrinsic evidence alone does not resolve the ambiguities in a disputed claim term, the court may in its discretion turn to extrinsic evidence. *See Vitronics Corp.*, 90 F.3d at 1583 (reasoning that it is improper to rely on extrinsic evidence when an examination of the intrinsic evidence resolves the ambiguities in a disputed claim term); *see also Phillips*, 415 F.3d at 1319. It is important to note, however, that extrinsic evidence “is less significant than the intrinsic record in determining the legally operative meaning of claim language.” *See Phillips*, 415 F.3d at 1317–19 (citation and internal quotation marks omitted) (noting that the Federal Circuit has generally viewed extrinsic evidence “as less reliable than the patent and its prosecution history in determining how to read claims,” and stating that the court should keep in mind the flaws inherent in the evidence and assess it accordingly). Additionally, “[e]xtrinsic evidence is to be used for the court’s understanding of the patent, not for the purpose of varying or contradicting the terms of the claims.” *Markman*, 52 F.3d at 981.

With the above principles in mind, the court will turn to the disputed claim terms.

### A. Surrounded (Claim 1) and Surrounds (Claim 2)<sup>5</sup>

At the Markman hearing, Okin proposed that “surrounded” means “generally enclosed or completely enclosed,” while “surrounds” means “generally encloses or completely encloses.” Kaidi, by contrast, asserts that “surrounded” means “completely or nearly completely encircled,” and that “surrounds” means “completely or nearly completely encircles.”<sup>6</sup> Although the parties agree that the construction must include a less-than-complete enclosure, they disagree on whether “nearly completely,” or “generally,” describes the relationship of guide sections 8 and 9 to spindle 6. *See* patent ‘144, col. 6, ll. 15–26 (emphasis added) (describing a “spindle . . . *surrounded* by a guide section . . . characterized in that the guide section has two parts and a slit between the two parts of the guide section”); *see also id.*, abstract (emphasis added) (stating that “the spindle (6) is *surrounded* by a two-part guide section (8, 9) . . . a slit being kept free between the two parts of the guide section (8, 9)”). The court shall construe “surrounded” as **completely or nearly completely enclosed**, and “surrounds” shall be construed as **completely or nearly completely encloses**.

The court agrees with Kaidi that Okin’s proposed construction lacks precision. The Federal Circuit has rejected proposed claim constructions that would render the claims indefinite and prevent one of ordinary skill in the art from determining their proper scope. *See Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1254–56 (Fed. Cir. 2008); *Geneva Pharm., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1384 (Fed. Cir. 2003). Here, it is unclear from the word “generally” how much guide sections 8 and 9 must enclose spindle 6.

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<sup>5</sup> Both parties agree that the court should construe “surrounded” and “surrounds” the same way, so that the patent remains internally consistent. *See Pfizer, Inc.*, 429 F.3d at 1373.

<sup>6</sup> Kaidi notes in its brief that “encircled” has the same meaning as “enclosed.” During the Markman hearing, Kaidi indicated that it had no objection to the court using the term “enclosed.”

Kaidi's proposed construction, on the other hand, is more precise and finds support in the claim itself and in the specification. As quoted above, Claim 1 specifies that there is a slit between the two parts of the guide section. *See* patent '144, col. 6, ll. 15–26. The term “slit” implies that there is only a narrow gap between the two parts of the guide section. Indeed, Figures 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, and 13 confirm that the slit is only a narrow gap and, thus, guide sections 8 and 9 nearly completely enclose the spindle.

### **B. Guide Section (Claim 1)**

Okin proposes that “guide section” means “guide section with two parts, or guide sections,” essentially arguing that this term requires no construction. According to Kaidi, “guide section” means “component that directs and supports a moving part.” Following the Markman hearing, it appears that the parties' dispute centers on whether the guide section *supports* a moving part. Concluding it does not, the court shall adopt the following construction: **two-part component that guides a moving part.**<sup>7</sup>

As a preliminary matter, Kaidi is correct that the term “guide section” requires construction. The meaning of “guide section” is not readily apparent; indeed, it appears to have specialized meaning within the art. *Cf. Phillips*, 415 F.3d at 1314 (stating that “[b]ecause the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically,” the court engages in claim construction). Additionally, where, as here, “the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it.” *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

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<sup>7</sup> The court does not perceive any meaningful difference between “guides” and “directs,” and the parties offered none during the Markman hearing.

Construing “guide section,” the court looks first to the claim term itself. The term “guide section” suggests that the component, quite simply, guides. The court agrees with Okin that the word “guide” cannot be interpreted to mean “support.” Likewise, turning to the specification, there is nothing to indicate that the guide section supports a moving part. Kaidi argues to the contrary, citing the following language in the specification:

*Considerable mechanical stability* of the overall drive in every stroke position of slider 18 is achieved by the one-piece connection of nut 16 to slider 18 and by the fact that nut 16 supports guide sections 8 and 9 internally and *slider 18 surrounds guide sections 8 and 9* with the same shape.

‘144 patent, col. 4, ll. 62-67 (emphasis added). But the quoted language does not state directly that “mechanical stability” is achieved by the guide section supporting slider 18. Rather, the only way to reach this conclusion is to accept Kaidi’s expert testimony interpreting the specification in this way. Kaidi also cites the way the slider is installed onto the two parts of the guide section to conclude that the guide section supports the slider. *See* ‘144 patent, col. 2, ll. 14–16. Once again, however, the court cannot reach this conclusion without simply accepting Kaidi’s expert testimony that the method of installation means the guide section supports the slider. Exercising its discretion, the court does not find it necessary to rely on extrinsic evidence to construe the term “guide section,” as the intrinsic evidence resolves any ambiguities. Therefore, based on the claim language and the specification, the court shall construe “guide section” as a **two-part component that guides a moving part**.

### C. Adjuster (Claim 1), Slider (Claim 1), and Slider (Claim 2)<sup>8</sup>

Okin proposes the following construction for “adjuster” and “slider”: “nut-slider being joined together by fins in a one-piece combination.” Kaidi, by contrast, maintains that “adjuster”

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<sup>8</sup> The parties agree that, in Claim 1, “adjuster” and “slider” are used interchangeably and, thus, the terms should be construed the same way. Additionally, the parties agree that the court should apply the same construction to the term “slider” in Claim 2.

and “slider” should be construed as a “component that surrounds and moves along the guide section while in contact with the guide section.” The parties’ dispute centers on whether the adjuster or slider surrounds the guide section and whether it is in contact with the guide section as it moves. Because there is support for only part of Kaidi’s proposed construction, the court shall adopt the following construction for “adjuster” and slider”: **component that moves along the guide section.**

The court rejects Okin’s proposed construction as unworkable. According to the ‘144 patent, the “nut moves longitudinally in a non-twisting manner within the guide section, the nut being connected to the adjuster.” ‘144 patent, col. 6, ll. 22–28. As stated by Kaidi, “[i]t is inconceivable how the ‘nut’ can be connected or joined to the ‘nut-slider’ ensemble that already includes the ‘nut’ itself.” (Kaidi’s Reply, ECF No. 50, at 20.) *Cf. Merck & Co., Inc.*, 395 F.3d at 1372 (rejecting a construction that results in “excess verbiage”).

Likewise, the specification does not indicate that the adjuster or slider is “in contact with the guide section.” To support its proposed construction, Kaidi notes that the specification refers to “the internal contour of slider 18 corresponding to the external contour of guide sections 8 and 9.” ‘144 patent, col. 4, ll. 60–62. But just because the contour of the slider aligns with the contour of the guide section does not mean the slider is in contact with the guide section. Kaidi also quotes other parts of the specification, which note that “[t]he nut is assembled with the slider by simply sliding it onto the guide section.” *Id.*, col. 2, ll. 14–15; *see also id.*, col. 5, 27–28 (stating that “[n]ut 16 and the corresponding slider 18 can be assembled by simply positioning it on guide sections 8 and 9”). The court, however, cannot conclude based on how the slider is installed that it is in continuous contact with the guide section as it moves. Nor is the court

convinced that Figure 4, which Kaidi cites for additional support, shows the slider in contact with the guide section.

The specification also does not indicate that the adjuster or slider surrounds the guide section. As Okin explains, when a particular limitation is imposed on a dependent claim, that same limitation is not imposed on an independent claim. *See Phillips*, 415 F.3d at 1315. Because Claim 2, a dependent claim, specifies that the “slider *surrounds the outside of the guide sections in a form-fitting manner*,” there is a presumption that this limitation does not apply to Claim 1, an independent claim. ‘144 patent, col. 6, ll. 29–31 (emphasis added). The court cannot agree with Kaidi that the limitation that differentiates Claim 2 from Claim 1 is “in a form-fitting manner,” not simply “surrounds.” Claim 1 uses the word “surrounded” to describe the relationship of the guide section to the spindle; it does not use this word to describe the relationship of the adjuster or slider to the guide section. Finally, as for any argument that the court must construe adjuster and slider according to the embodiment contained in the ‘144 patent, the court notes that the specification refers to the embodiment as “a practical example,” not as the only embodiment or “the invention.” ‘144 patent, col. 3, ll. 45–46. *Cf. Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1330 (Fed. Cir. 2009) (citation and internal quotation marks omitted) (“[W]hen the preferred embodiment is described in the specification as the invention itself, the claims are not necessarily entitled to a scope broader than that embodiment.”). Accordingly, the court shall construe “adjuster” and “slider” as **component that moves along the guide section**.

#### **D. Two Parts (Claim 1)**

Okin proposes that the term “two parts” needs no construction. But Kaidi proposes that the term means: “two portions having the same type of material, and substantially the same



contour cross-sectional shape and contour cross-sectional thickness.” During the Markman hearing, Kaidi added to its proposed construction that “each portion directs and supports a moving part.” The court agrees with Okin that “two parts” does not require construction because the meaning of this term is immediately apparent, even to lay persons. *Cf. Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001) (giving the word “or” its plain meaning, reasoning that it is not a “technical term[] of art” and “do[es] not require elaborate interpretation”); *see also Phillips*, 415 F.3d at 1314 (“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.”). Accordingly, “two parts” means, quite simply, two parts.

#### **E. Slit (Claim 1)**

According to Okin, “slit” means “a slit with openings on two sides of the guide section.” Kaidi asks for the construction of “narrow opening or openings.” Thus, the parties agree that a “slit” may include multiple openings, but disagree over whether a slit may include a single opening. The court shall adopt Kaidi’s proposed construction of **narrow opening or openings**.

The court rejects Okin’s proposed construction for two reasons. First, the proposed construction does nothing “to determin[e] the meaning and scope of the patent claims asserted to be infringed,” which is the purpose of claim construction. *See O2 Micro Int’l Ltd.*, 521 F.3d at 1360 (citation and internal quotation marks omitted). Rather, Okin relies on the word “slit” to construe that same term. Second, the proposed construction is inconsistent with the claim language, which specifies that the slit is located “between the two parts of the guide section.” ‘144 patent, col. 6, ll. 25–26. Under Okin’s interpretation, the openings may be located on any side

of the guide section.

Kaidi's proposed construction, by contrast, finds support in the claim itself and in the specification. The claim states that there is "*a slit* between the two parts of the guide section," which suggests there may be a single opening. *Id.* (emphasis added). Likewise, the specification refers to "*a slit* being kept free between the two parts of the guide section." *Id.*, col. 2, ll. 2–3; *see also id.*, abstract (emphasis added) (mentioning "*a slit (10)* being kept free between the two parts of the guide section (8, 9)"); *id.*, col. 3, l. 6 (emphasis added) (referring to "*the slit* between the guide sections"). The court, therefore, agrees with Kaidi that a slit may include a single opening, and shall adopt its proposed construction.

### CONCLUSION

The construction of each disputed claim term is set forth in a separate Order which follows.

May 12, 2014  
Date

/s/  
Catherine C. Blake  
United States District Judge